

*Transmitted Via Facsimile to (571) 273-8300*

PATENT  
138543 (553-1077)

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**DEC 31 2007**

IN THE CLAIMS:

1-5. (Cancelled)

6. (Currently amended) A method for implementing a speckle reduction filter comprising:

receiving a processed data stream from a processor;

dividing the processed data stream into data subsets;

simultaneously filtering the data subsets by using a speckle reduction filter to produce filtered data subsets; and

producing an image data stream based on the filtered data subsets,

wherein the filtering step is based on adjustable speckle reduction parameters, the method further comprising:

changing values of the speckle reduction parameters between different first and second value sets to form a first and second image data streams; and

simultaneously co-displaying a first image and a second image on a common screen, wherein the first image is generated from the first image data stream, and wherein the second image is generated from the second image data stream, and further wherein the first image and the second image are speckle-reduced images using the speckle reduction parameters of the first value set and the speckle reduction parameters of the second value set, respectively.

7. (Previously presented) A method for implementing a speckle reduction filter comprising:

receiving a processed data stream from a processor;

dividing the processed data stream into data subsets;

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simultaneously filtering the data subsets by using a speckle reduction filter to produce filtered data subsets;

producing an image data stream based on the filtered data subsets;

simultaneously co-displaying, in a dual display mode, a filtered image and an original unfiltered image on a common screen, wherein the filtered and the original unfiltered images are reconstructed from a data set that includes the image data stream and the processed data stream; and

enabling a user to enter the dual display mode at least one of during a scan and while a replay of pre-recorded cine loops is displayed on a screen.

8. (Cancelled)

9. (Currently Amended) ~~[[A]]The method for implementing a speckle reduction filter according to claim 6 further comprising:~~

~~receiving a processed data stream from a processor;~~

~~dividing the processed data stream into data subsets;~~

~~simultaneously filtering the data subsets by using a speckle reduction filter to produce filtered data subsets; and~~

~~producing an image data stream based on the filtered data subsets,~~

~~wherein the filtering step is based on adjustable parameters, the method further comprising:~~

~~automatically, without user intervention, optimizing the parameters based on a scan of an imaging system and what is being imaged.~~

10-25. (Cancelled)

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138543 (553-1077)

26. (Currently amended) A computer readable medium storing a computer program which, when executed by a processor, causes the processor to perform a method comprising:

receiving a processed data stream from a processor;

dividing the processed data stream into data subsets;

simultaneously filtering the data subsets by using a speckle reduction filter to produce filtered data subsets; and

producing an image data stream based on the filtered data subsets,

wherein the filtering step is based on adjustable speckle reduction parameters, the method further comprising:

changing values of the speckle reduction parameters between different first and second value sets to form a first and second image data streams; and

simultaneously co-displaying a first image and a second image on a common screen, wherein the first image is generated from the first image data stream, and wherein the second image is generated from the second image data stream, and further wherein the first image and the second image are speckle-reduced images using the speckle reduction parameters of the first value set and the speckle reduction parameters of the second value set, respectively.

27. (Currently amended) An ultrasound imaging system comprising:

a transducer array;

a beamformer;

a processor for processing a receive beam from the beamformer;

a scan converter and display controller operationally coupled to the transducer array, the beamformer, and the processor, the scan converter and display controller configured to:

receive a processed data stream from the processor;

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divide the processed data stream into data subsets;

simultaneously filter the data subsets by using a speckle reduction filter to produce filtered data subsets; and

produce an image data stream based on the filtered data subsets,

wherein said filtering is based on adjustable speckle reduction parameters, and the processor, the scan converter and display controller further configured to:

change values of the speckle reduction parameters between different first and second value sets to form a first and second image data streams; and

simultaneously co-display a first image and a second image on a common screen, wherein the first image is generated from the first image data stream, and wherein the second image is generated from the second image data stream, and further wherein the first image and the second image are speckle-reduced images using the speckle reduction parameters of the first value set and the speckle reduction parameters of the second value set, respectively.